

A Case of Teratology in *Monopsyllus vison* (Baker)

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Abstract: A female *Monopsyllus vison*, collected in Essex County, New York, had parts of three spermathecae, the three bulgae being fused at their bases. In addition, sternites VII and VIII were quite unlike the normal form.

Teratology in fleas has been the subject of numerous papers, especially those of Smit (1949a, 1949b, 1952, 1953) and Holland (1943, 1959). In male fleas, abnormalities usually take the form of partial or complete castration, and/or bizarre malformations of the sclerites. In females, abnormalities of the spermatheca are most frequently described, particularly the presence of two spermathecae in those species which normally possess only one. This phenomenon has been reported for at least eight species. In addition to the above cited papers, such specimens have been noted by Ewing and Fox (1943); Stark (1953); Sharma and Joshi (1961); Holland (1949); and Mead-Briggs (1964).

In a large collection of fleas from Whiteface Mountain, Essex County, New York, one female *Monopsyllus vison* presents a most unusual appearance. This specimen was taken from a red squirrel, *Tamiasciurus hudsonicus*, on August 27, 1962, by Charles Sloger.

The appearance of the terminalia is shown in Figure 1, contrasted with the appearance of a normal female of this species from the same locality shown in Figure 2. The spermatheca appears to be tripled, with the three bulgae connected at their bases. The small object lying dorsad to the spermathecae appears to be the third hilla, which may have become detached during clearing. It could conceivably be a section of the bursa copulatrix, but this structure is not usually evident in this species. Sternites VII and VIII are also totally unlike those of normal specimens of this species.

Records of specimens with two more or less complete spermathecae fused together are given by Holland (1943), Smit (1949a), and Mead-Briggs (1964). I have seen no records of a specimen with three fused spermathecae.

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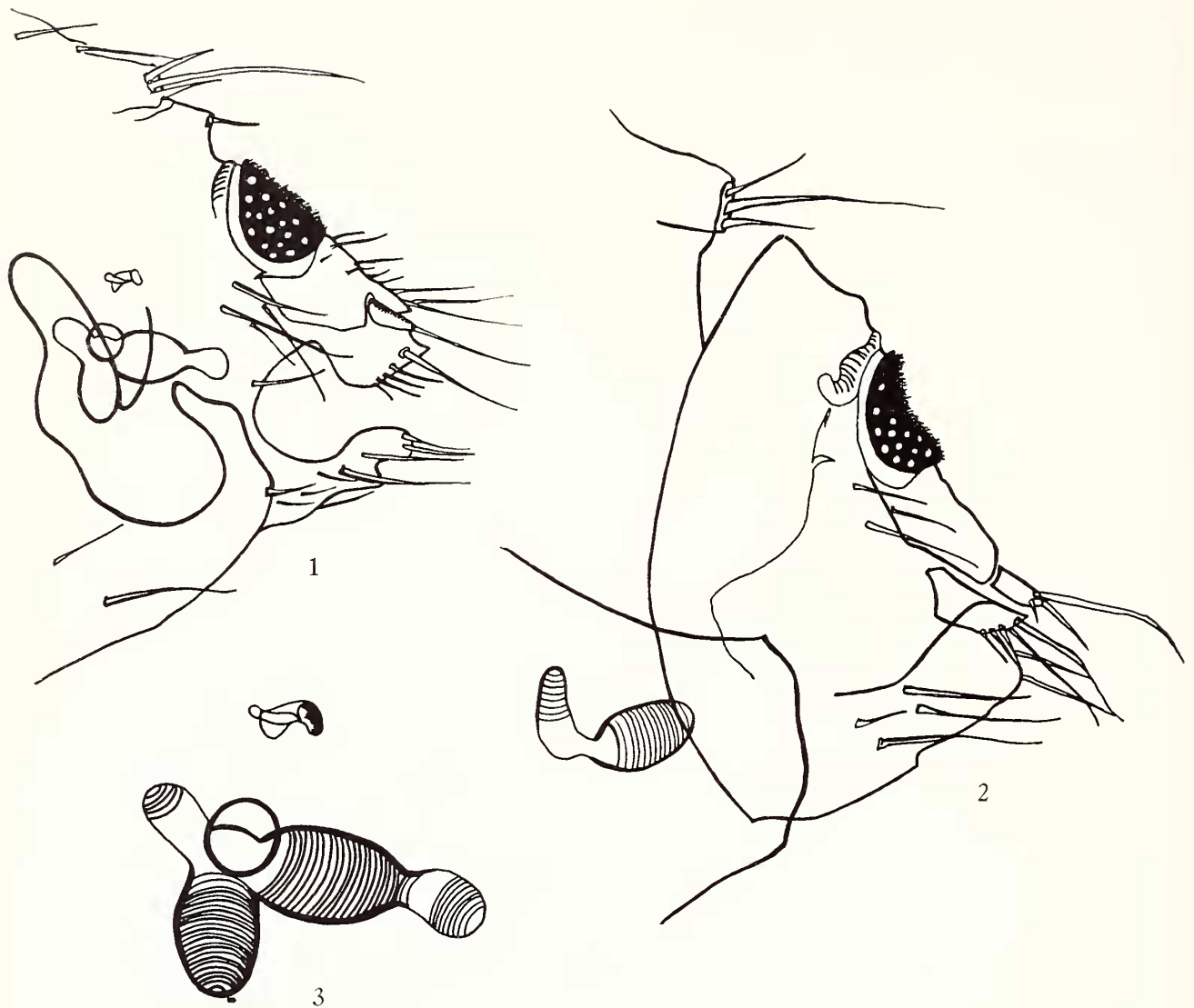


FIG. 1. Terminalia of female *Monopsyllus vison* (Baker) collected at Whiteface Mountain, Essex County, N. Y., August 27, 1962.

FIG. 2. Terminalia of normal female *Monopsyllus vison* (Baker) collected at Whiteface Mountain, Essex County, N. Y., August 30, 1962.

FIG. 3. Fused spermathecae of female shown in Fig. 1. Detached segment at top appears to be a disconnected hilla.

The specimen is in the collection of the Department of Biology, State University College at Fredonia.

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